CITY AND COUNTY OF SAN FRANCISCO
BOARD of SUPERVISORS

OFFICE OF THE LEGISLATIVE ANALYST

LEGISLATIVE ANALYST REPORT

TO: HONORABLE MEMBERS OF THE BOARD OF SUPERVISORS
FROM: Gabe Cabrera, Legislative Analyst
COMMITTEE: Transportation and Land Use
FILE NUMBER: 00-2106 - Urban Forestry Council
ORIGIN: Supervisor Katz
HEARING DATE: December 14, 2000, with revision January 2, 2001.
SUBJECT: **A SURVEY OF MUNICIPAL TREE PROGRAMS**

Summary of Requested Action

The San Francisco Board of Supervisors requested that the Office of the Legislative Analyst (OLA) conduct a survey of successful municipal tree programs.

This request was submitted in two parts. The first part sought information on such components as program efficiency; a well-stocked healthy tree canopy; an informed, supportive and involved constituency; and tree-focused city planning. The second part asked for additional information including costs and funding sources of tree programs surveyed; steering committees; and the role of private non-profit organizations in tree programs. Both parts asked that certain municipalities be surveyed. These two parts have been consolidated and are addressed in this report.

Executive Summary

This report examines successful tree programs in three California cities: Claremont, Modesto and Los Angeles; and New York City; Milwaukee, Wisconsin; and Seattle, Washington. Each city has developed a tree program that is uniquely suited for managing and caring for its trees. However, there are certain characteristics that appear in most, if not all, of these tree programs.

First, cities surveyed have either a single agency responsible for managing both street and park trees, or working groups, to coordinate inter-departmental tree efforts and reduce overlap. Second, most cities use a combination of funding sources to support their tree programs. Third, a few cities have a tree advisory committee, and those without such committees tend to have partnerships with private urban forestry organizations as well as support from citizen groups. Fourth, all of the cities surveyed have developed tree inventories or databases. This mechanism improves a city's ability to respond to service requests and maintain more regular trimming/pruning cycles. Fifth, many cities have passed tree ordinances, outlining their polices and procedures for managing public trees as well as the responsibilities of property owners concerning trees in the public right-of-way. Finally, most cities perform tree maintenance on a service-area basis, rather than in response to individual requests for service. This strategy reduces maintenance costs and enhances overall tree health.

Current Law and Practice

Figure 1: San Francisco
City Population: 800,000
Total Number of Street Trees: 90,000
Number of Street Trees per Capita: 0.11
FY 00-01 Tree Budget: $2.3 million (for tree maintenance only)
Average FY 00-01 Expenditure per Tree: Not calculable (see text)
Length of Pruning Cycle: 7 years
Percentage of Trees in Excellent/Good Condition: Not available
Note: Financial figures are for street trees only.
Source: OLA and the City's Division of Urban Forestry

The City and County of San Francisco - There is currently no citywide approach to managing municipal trees and no citywide database exists that contains information about all trees in the City. A number of City departments own trees, and there are different departmental-level management approaches. In addition, most departments do not maintain data on their trees.

Two City departments are primarily responsible for managing trees. The Department of Public Work's (DPW) Division of Urban Forestry manages approximately 30,000 street trees. Another estimated 60,000 street trees are maintained by private property owners. The Division keeps an inventory of all City-managed street trees. This inventory is shared with the TreeCorps program, which, under the aegis of the Sheriff's Department, is responsible for planting and watering some DPW trees. The Recreation and Park Department (RPD) manages about 27,000 additional trees in parks and squares throughout the City. Its inventory includes trees that are more than 6-inches in diameter and more than 20-feet tall as they have the greatest potential to cause harm by falling or spreading disease. In addition, RPD is responsible for trees in natural areas and open spaces (approximately 75,000). However, this report examines street trees only.

Although DPW strives to perform tree maintenance on a service area basis, individual requests for tree services receive highest priority, and can divert resources from scheduled maintenance. As a result, regular tree maintenance is, on average, once every 7 years. The City's Urban Forester advises that the majority of City-managed street trees are in good condition. However, approximately 400 trees along Sunset Boulevard and Brotherhood Way are susceptible to Pine Pitch Canker, an incurable disease, and will likely die within the next several years.

In FY 00-01, the Division's budget for tree maintenance is about $2.3 million, including tree pruning, removals, staking, weeding, and other miscellaneous activities as well as tree-related sidewalk repairs. The City's average expenditure per tree is not calculable since tree costs are not a separate line item. Of the $2.3 million budget, $1.8 million is from the State Gas Tax and $500,000 comes from the San Francisco Transportation Authority.

Article 16 of the City's Public Works Code, the Urban Forestry Ordinance, contains rules and regulations governing street trees. The Recreation and Open Space element of the City's General Plan, Objective 2, Policy 9: Maintain and Expand the Urban Forest. Policy 9 encourages the City to implement a reforestation program that includes a systematic inventory; planting, re-planting and maintenance standards; wood waste management and utilization; and interagency coordination and public information.

In San Francisco, the Tree Advisory Board advises DPW on street tree issues. However, there is no citywide or inter-departmental tree advisory committee in San Francisco. There is at least one private urban forestry group operating in the City. Friends of the Urban Forest (FUF) is a community-based organization which works in

partnership with neighbors, business and the City to expand and maintain the City's urban forest. To date, FUF has planted over 33,000 street trees citywide (which are cared for by private property owners).

Tree Programs in Other Jurisdictions

The City of Claremont - The Community Services Department (CSD) is responsible for managing trees on City property. There are over 23,000 trees citywide, including approximately 19,000 street trees and 4,000 park trees. CSD performs routine maintenance on all City-owned trees, on average, once every 3 to 6 to 9 years, depending on species type. The Department maintains its trees on a request for service basis (except newly planted trees which are pruned on a block-by-block basis). CSD keeps an inventory of all City-owned trees, including detailed site characteristics and work histories for each tree.

Figure 2: Claremont

City Population: 35,413

Total Number of Street Trees: 19,000

Number of Street Trees per Capita: 0.54

FY 99-00 Tree Budget: $568,920 (for tree maintenance only)

Average FY 99-00 Expenditure per Tree: $24.74

Length of Pruning Cycle: 3, 6, or 9 years

Percentage of Trees in Excellent/Good Condition: 78%

Note: Financial figures are for both street and park trees.

Source: OLA and the City of Claremont

In FY 99-00, CSD's operating budget for trees totaled $568,920, including $198,000 for City staff and $370,920 for contract services and other miscellaneous expenses. Thus, expenditure per tree averaged $24.74 (based on 23,000 street and park trees citywide). As in previous years, the Department's FY 99-00 budget for trees was funded with a combination of General Fund dollars and revenues generated from the City's Landscape and Lighting District (LLD), a special assessment district.

The Community Services Commission serves as the City's tree advisory board. The Commission holds regular meetings for the purpose of reviewing tree-related issues and determining the needs of the City with respect to its tree planting and maintenance programs. It makes recommendations to the City Council on polices and ordinances which pertain to the care and protection of public trees, and on selecting species of trees for designation along City streets. It also helps to educate and inform the public on proper tree care, and promotes the value of trees to the community.

There are currently no private urban forestry organizations operating in Claremont. According to CSD staff, the majority of residents support the City's tree program. Residents are responsible for protecting and watering any City tree located within the public easement on their property, and to notify CSD of any tree hazards or maintenance needs. Also, any person wishing to remove, cut, prune, spray for control of insects and disease, and otherwise disturb a City tree must first obtain a permit from CSD.

Trees are an important element of city planning in Claremont. The City's General Plan refers to trees in several of its policies. For example, General Policy 3 states, "The City shall encourage preservation and enhancement of existing landscaping, recognizing the importance of tree-lined streetscapes to the image of Claremont." At least two other polices in the General Plan refer to the preservation and enhancement of trees.

According to Claremont officials, the majority of the City's trees are healthy; 78% of trees are in good condition and 18% are in fair condition. Only 4% are in poor condition, dying or dead. CSD designates certain

tree species for each street to ensure that the right tree is planted in the right place. Species are designated based upon (among other criteria) pest and disease resistance, drought tolerance, shading potential and availability. Other program highlights include: a tree policy manual that defines the City's policies and procedures for the management and care of City-owned trees, and special protection status for certain trees which by virtue of their species, size, age, appearance or historical significance are determined to be "outstanding" by the City's Community Services Commission.

Figure 3: Modesto

City Population: 150,000

Total Number of Street Trees: 78,000

Number of Street Trees per Capita: 0.52

FY 97-98 Tree Budget: $2,215,000 million (for tree maintenance and new plantings)

Average FY 97-98 Expenditure per Tree: $24.29

Length of Pruning Cycle: 4.5 to 5 years

Percentage of Trees in Excellent/Good Condition: 76%

Note: Financial figures are for both street and park trees.

Source: OLA and the City of Modesto

The City of Modesto - The Community Forestry Division (CFD) of the Operations and Maintenance Department is responsible for managing all street and park trees in Modesto. There are approximately 103,000 trees citywide, including 78,000 street trees and 25,000 park trees. A street tree inventory was originally conducted in 1985 and has been periodically updated in a tree inventory management database.

The CFD spent approximately $2,215,000 million on its tree program in FY 97-98 (the latest year for available data). Of this amount, $315,572 was for City staff, $271,090 was for tree establishment and $1,627,842 for mature tree care. At that time, there were 91,178 trees citywide; thus, the City spent, on average, $24.29 per tree during the fiscal year. The majority of the program's costs are funded with General Fund dollars and revenues received from the State Gas Tax (about $800,000 annually). The CFD also receives revenues from tree services it provides to other entities within the City ($63,132 in FY 97-98).

The City does not have a tree advisory committee. CFD staff advise that the vast majority of Modestans support the City's tree program. As such, there has not been a need for private urban forestry organizations to operate in Modesto. Nevertheless, the Tree Foundation is in the process of being established. Its primary goal will be to seek additional funding sources for new tree plantings and maintenance. Initially, the foundation will be funded by both the City and Modesto's local utility district with the district expected to assume greater fiscal support in the future.

In Modesto, tree maintenance is done on a service area basis, rather than in response to individual requests. CFD performs routine maintenance, such as pruning, on all public trees in an assigned service area before moving to another service area. Trees are inspected and pruned on approximately a 4.5 to 5 year cycle. This strategy has reduced costs by 300 percent and enhanced overall tree health, according to a recent benefit-cost analysis report.[1]

City planning in Modesto does not focus on trees per se. However, in 1961, the City Council passed a Street Tree Ordinance that requires the City to prepare a street tree plan and clarify the limitations and responsibilities of property owners, utility companies and the City regarding trees. The Street Tree Master Plan was

[1] Western Center for Urban Forest Research and Education., UC Davis. March 1999. "Benefit-Cost Analysis of Modesto's Municipal Forest." Davis, California.

subsequently adopted by the City Council in 1987. It provides a detailed plan, including policies and procedures, for planting, maintenance and preservation of municipal trees.

Overall, Modesto's trees appear healthy. Based upon a sampling of City trees, 18% of all trees are in excellent condition, 58% are in good condition and 21% are in fair condition. Only 3% of trees are in poor condition, dying or dead. Modesto officials state that healthy trees provide an indication of their suitability to local growing conditions and the effectiveness of service area-based maintenance. One other highlight of this tree program is that CFD is solely responsible for repairing sidewalks damaged by tree roots. In other jurisdictions, this action is less efficient because it is typically divided between two City agencies.

The City of New York - The Parks and Recreation Department is responsible for all street and park trees in the City. There are approximately 2.5 million trees citywide, including 500,000 street trees and 2 million park trees. In 1995, the Department conducted a census to inventory all street trees, and recorded trees by species, size, location and condition. The City is divided into five boroughs (Bronx, Brooklyn, Manhattan, Queens, and Staten Island) and the Parks and Recreation Department has a Borough Forestry Office in each borough that maintains street and park trees.

Figure 4: New York

City Population: About 7.4 million

Total Number of Street Trees: 500,000

Number of Street Trees per Capita: 0.07

FY 99-00 Tree Budget: $13.92 million (for tree maintenance and new plantings)

Average FY 99-00 Expenditure per Tree: $27.84

Length of Pruning Cycle: 10 years

Percentage of Trees in Excellent/Good Condition: 89.3%

Note: Financial figures are for street trees only.

Source: OLA and the New York City

In FY 99-00, the Department's total budget was approximately $400 million, including $180.552 million for operating expenses funded through the City's General Fund and $200 million for "capital projects" (new construction projects), which are financed by bonds and allocated by the Mayor, Borough Presidents and City Council.

With respect to street trees only, in FY 99-00, the Department spent $13.92 million, including $9.15 million for capital projects (e.g., new tree plantings) and $4.77 million for operating expenses (i.e., tree pruning, dead tree and stump removal, emergency work and disease control). Thus, on average, the Department spent $27.84 per tree during the fiscal year.

New York does not have tree ordinance or a tree advisory committee. However, the City has formed hundreds of partnerships with "friends of the parks" groups that are rejuvenating parks and trees. These groups informally offer the City advice on tree-related issues, according to the Department. Partnerships include the City Parks Foundation which raises private funds and gives out more than $100,000 to community groups working to "clean and green" their parks, provide recreation opportunities for children, or present free arts performances to the public in the parks. Partnerships for Parks (an initiative of the City Parks Foundation and the City) encourages community support for and involvement in parks. In FY 99-00, it made 85 grants totaling $185,000 to neighborhood groups helping to rejuvenate parks and trees.

In 1997, Parks and Recreation started a program of routine maintenance for street trees on a block-by block basis. Under this program, the Department is able to prune trees on a 10-year cycle. According to Department officials, by pruning trees on a block-by-block basis, the City makes more efficient use of its resources

compared to pruning in response to public requests scattered throughout the City. The Department continues to respond on demand to emergency requests for services.

Parks and Recreation in cooperation with the Department of Transportation operates a program ("Greenstreets") that converts street properties (like triangles, malls and traffic islands) to green spaces by removing payment and planting trees, shrubs and flowers. In 1999, Parks and Recreation planted 800 greenstreets and intends to plant a total of 2,001 greenstreets in FY 2001. The Department works with community-based organizations to help keep these sites watered and well-maintained.

New York's street trees appear to be healthy. According to New York officials, 20.7% of the trees are in excellent condition and 68.6% are in good condition. Only 8% are in poor condition and 2.7% are dying or dead. Other program highlights include a "Street Tree Labeling" program that provides identifying labels for trees. According to Department staff, trees with labels are more likely to be nurtured, protected and appreciated. Finally, residents may get a street tree planted in front of their home or business (within approximately 6 months), by calling the City's "One Stop Tree Shop" and making a tax deductible contribution to the program.

Figure 5: Los Angeles

City Population: 3.7 million

Total Number of Street Trees: 680,000

Number of Street Trees per Capita: 0.18

FY 99-00 Tree Budget: $12.85 million (for tree maintenance only)

Average FY 99-00 Expenditure per Tree: $18.90

Length of Pruning Cycle: 7 years

Percentage of Trees in Excellent/Good Condition: Not available

Note: Financial figures are for street trees only.

Source: OLA and the City of Los Angeles

The City of Los Angeles - The Street Tree Division (STD) of the Department of Public Works manages about 680,000 street trees, while the Recreation and Parks Department handles about 800,000 park trees. This report examines street trees only.

In FY 99-00, the Street Tree Division's budget was $12.85 million, including roughly about $10 million for trees and $2.85 million for landscaped medians. Therefore, the Division spent, on average, about $18.90 per tree during the fiscal year (based on 680,000 street trees). As of the writing of this report, the Division had not provided detailed information about the program's funding sources. However, the assistant head of the Division states that the program uses both General Fund dollars and non-General Fund sources.

The Division is responsible for trimming, dead tree stump removal, tree planting, small tree maintenance, responding to emergencies, watering, pest management and maintaining landscaped median islands. It maintains a computerized inventory of trees and performs routine maintenance on trees, on average, once every 7 years. The STD recently shifted to "grid" or "programmed crew operations". Previous to this change, small tree trimming crews responded to individual requests for service. Today programmed tree crews may trim hundreds of trees in close proximity to each other, according to Los Angeles officials.

Los Angeles does not have a tree ordinance. However, the Los Angeles Community Forestry Advisory Committee (LACFAC) is the City's tree advisory committee. Sixteen members appointed by the City Council serve two year terms. The Committee's purpose is to act as an advocate for the City's urban forest. In addition, the City recently formed the Sustainable Urban Forest Workgroup (SUFW) to coordinate inter-departmental urban forestry efforts, planning activities and programs, and to review City urban forestry issues and potential

funding sources. This Workgroup reports regularly to LACFAC and the City Council, and is currently working on a management audit of all City agencies responsible for managing trees.

There are several private urban forestry organizations operating in Los Angeles, including Tree Musketeers, Treecyclers and TreePeople. TreePeople is partially funded by the City. Its goal is to inspire residents to get involved in community improvement through tree planting and care, and to promote the concepts of urban forestry. Projects include the annual fruit tree distribution program and the Department of Water and Power's "Cool Schools" program. Through Cool Schools, the Department is demonstrating how the strategic planting of shade trees can reduce energy use and costs, and provide students with comfortable learning environments.

As noted above, the Street Tree Division maintains all street trees. However, if individuals or groups want to plant a tree, those persons may apply for a permit. They must agree to water and maintain the tree for the first five years. Thereafter, the City will assume responsibility for the care of the tree. Additionally, LA's "Adopt-a-Median" program allows individuals or groups to make improvements on a median island and assume the maintenance of the median.

In Los Angeles, City officials have developed a "Street Tree Selection Guide". There are over 150 species on this list which was developed with the City's micro climates and soil conditions in mind. To ensure diversity, many native trees and a variety of trees of different sizes, shapes and growth characteristics were included. As of the writing of this report, the Division had not provided information regarding the condition of its trees. However, anecdotal reports by staff suggest that the majority of trees in Los Angeles are healthy.

The City of Milwaukee - The Division of Forestry with the Department of Public Works is responsible for maintaining 200,000 trees growing along streets and boulevards throughout the City. The Division also manages tot lots, green spaces, designated municipal properties and downtown above ground planters.

In 1999-00, the Division's budget totaled $10.973 million, including approximately $10 million for operating and maintenance costs (O&M) and $973,000 for capital project costs. It is not possible to calculate an average expenditure per tree because tree costs are not a separate line item in the Division's budget. According to the City's Forester, O&M costs were funded with General Fund dollars, while capital projects were funded by bonds issued by the City.

Milwaukee does not have a tree advisory committee. The City Forester advises that residents generally support the City's tree program. In terms of partnerships with citizen groups, the Division recently initiated a long-term program, called Greening Milwaukee, for community-based tree planting in the City. Under this program, Milwaukee Community Service Corps, a non-profit organization, and the City work with private landscaping services and

Figure 6: Milwaukee

City Population: 620,000

Total Number of Street Trees: 200,000

Number of Street Trees per Capita: 0.32

FY 99-00 Tree Budget: $10.973 million (for tree maintenance and new plantings)

Average FY 99-00 Expenditure per Tree: Not calculable

Length of Pruning Cycle: 3 or 6 years, depending on size

Percentage of Trees in Excellent/Good Condition: Not available

Note: Financial figures are for street trees only.

Source: OLA and the City of Milwaukee

nurseries to obtain donated trees or trees at a discount, and to identify other potential funding sources for trees. The Division also provides technical assistance to citizens as part of the program.

The City does not have a street tree database. According to the City Forester, this database would be cumbersome and expensive to maintain. However, the Division has a service request database that includes detailed site characteristics, work histories and costs for each tree. Milwaukee has a tree ordinance that primarily pertains to tree-related issues on private property, such as hazardous trees, and the City's responsibility for tree plantings. In addition, the Division's policies and procedures relate to tree preservation and protection, cost for damages, and saving trees on construction projects.

The Division divides its trees into 160-acre management units, called quarter sections, and maintains trees on regular pruning cycles. Trees that are less than 12-inches in diameter are pruned every 3 years, while those trees greater than 12-inches in diameter are pruned every 6 years. As of the writing of this report, the Division had not yet provided information about the condition of its trees. However, the City Arborist states that the majority of Milwaukee's trees are healthy.

Other program highlights include the Division's operation of a 160-acre municipal nursery which grows between 20,000 and 25,000 trees at any given time, and a Comprehensive Boulevard Plan that outlines maintenance for the annual flowers and perennial plants, turf and trees along 120 miles of Milwaukee's boulevards.

Figure 7: Seattle

City Population: 540,000

Total Number of Street Trees: 139,000

Number of Street Trees per Capita: 0.26

FY 99-00 Tree Budget: $934,924 (for tree maintenance only)

Average FY 99-00 Expenditure per Tree: $6.73

Length of Pruning Cycle: 19 years

Percentage of Trees in Excellent/Good Condition: 59%

Note: Financial figures are for street trees only.

Source: OLA and the City of Seattle

The City of Seattle - Seattle Transportation (SEATRAN) manages approximately 139,000 street trees and the Department of Parks and Recreation manages 115,000 park trees. Residential lots add, at least, another 250,000 to 400,000 trees, for a total of approximately 500,000 to 750,000 trees citywide. It is important to note that Seattle's last street tree inventory was completed in 1992, and therefore, trees added since then have not been counted.

The City spends an estimated $2.3 million on tree management and maintenance in neighborhoods, parks and opens spaces within the City. With respect to street trees only, the Department spends about $934,924 annually. Thus, the City's average annual expenditure per street tree is about $6.73. These costs are entirely funded from the City's General Fund.

Seattle does not have a tree advisory committee. However, one may soon be formed if voters in Seattle approve a bond measure to fund neighborhood "greening" projects during this election cycle.

The City's Urban Forest Coalition is an interdepartmental partnership. Its mission is to coordinate the functions of City departments responsible for trees. Coalition members are: representatives from the SEATRAN, Department of Parks and Recreation, Seattle City Light, the Department of Neighborhoods and the City's Strategic Planning Office.

The City maintains its trees on a request for service basis, on average, once every 19 years. This cycle provides little opportunity for regular updating of information on the City's tree inventory. Residents are encouraged to maintain City-owned trees on public right-of-way areas. In order to do so, they must first obtain a street use permit from the City Arborist's Office.

There are several private urban forestry organizations operating in Seattle. The City collaborates with at least one. TREEmendous Seattle is a public/private partnership. Its mission is to unite and coordinate the efforts of volunteers, communities and businesses, non-profit organizations and government agencies to plant, preserve and maintain a healthy urban forest in the Puget Sound Area. In terms of partnerships with citizen groups, SEATRAN, in collaboration with the Department of Parks and Recreation, Seattle City Light and TREEmendous Seattle operates the Tree Stewards program. The goal of this program is to provide training and support to volunteers who want to be involved in urban forestry issues. The volunteers help to care for trees and also help to educate the public about trees. In addition, the Department of Neighborhoods' Tree Fund program budgets $100,000 annually for community organizations and groups of neighbors to plant trees. In 1999, 100 projects received approximately 2,300 trees from this source.

Seattle's Street Tree Master Plan (1990-1999) is a comprehensive three-phase study that recommends priorities for tree plantings on Seattle's streets, provides a list of trees for appropriate planting on streets, and explores new concepts for street tree plantings to connect existing open spaces and green areas in the City. The Street Tree Master Plan serves as a mechanism to prioritize areas for tree plantings and identifies tree species for planting and removal. The City is currently in the process of establishing policies and guidelines aimed at tree protection and maintenance, including a street tree ordinance and tree protection standards.

In 1992, Phase I of the above-noted Street Tree Master Plan inventoried (among other statistics) the condition of the City's then 84,000 street trees. According to this study, 25% of all trees were in great condition, 34% were in good condition, 31% were in poor condition, 8% were ¼ to ½ dead and 3% were over half dead. A Seattle program highlight is "A City Among the Trees", a 20-minute video with companion workbook, created by the Urban Forest Coalition and several community partners to highlight specific examples of sustainable urban forestry techniques.

Conclusion

As discussed above, each of the successful tree programs surveyed is uniquely suited for managing its trees. However, there are certain characteristics that appear in most of the programs.

First, several cities have a single city agency responsible for managing both street and park trees to increase program efficiency. These cities include Claremont, Modesto and New York. Except for New York, these cities tended to have substantially fewer park trees than street trees, facilitating their consolidation of tree management. Other cities, like Los Angeles and Seattle, have working groups to coordinate inter-departmental tree efforts and reduce overlap. In San Francisco, two departments (DPW and RPD) are primarily responsible for managing trees. Their tree efforts are not specifically coordinated.

Second, most cities studied, except Seattle, use a combination of funding sources to support their tree programs, including, but not limited to, General Funds, bond sale proceeds and special assessment districts. Only Seattle supports its program entirely with its General Fund. In the case of Seattle, a recent study advises that the

current level of funding is insufficient to cover the costs of maintaining existing trees.[2] Not surprisingly, among the cities surveyed, Seattle has the longest tree maintenance cycle (19 years). San Francisco's street tree program does not receive any support from the General Fund. It is funded entirely by the State Gas Tax and the San Francisco Transportation Authority.

Third, a few cities, like Claremont and Los Angeles, have a tree advisory committee that considers tree policies, advises decision-makers on tree issues, and generally promotes the value of trees to the public. Cities without tree advisory committees tend to have strong working partnerships with private urban forestry organizations as well as support from citizen groups. These cities include Modesto, New York and Milwaukee. In San Francisco, the Tree Advisory Board advises DPW on street tree issues. However, there is no citywide or inter-departmental tree advisory committee in San Francisco.

Fourth, all of the cities surveyed have developed inventories or databases for their street trees. These inventories typically include species, size, age and condition of trees; some include site characteristics and work histories. Claremont has inventoried both street and park trees, as its number of park trees is relatively small. All of the cities reported that this mechanism improved their ability to respond to service requests and maintain more regular maintenance cycles. In San Francisco, DPW maintains a database of all City-managed street trees, while the RPD inventories park trees above a certain diameter and height.

Fifth, a number of cities, including Claremont, Modesto and San Francisco, have passed tree ordinances that contain municipal polices and procedures for managing public trees. These ordinances also include the responsibilities of property owners concerning trees in the public right-of-way.

Finally, almost all of the surveyed cities, except Claremont and Seattle, perform tree maintenance on a service-area basis, rather than in response to individual requests for service. This strategy appears to reduce maintenance costs and enhance overall tree health. In San Francisco, although DPW strives to perform tree maintenance on a service area basis, individual requests for tree services receive highest priority, and can divert resources from scheduled maintenance.

In addition, each of the tree programs surveyed has unique components. For instance, Claremont supports its program, in part, with revenues generated from a special assessment district; Modesto's Community Forestry Division is responsible for both tree management and sidewalk repairs; New York's "One Stop Capital Shop" allows residents to arrange for tree plantings over the phone, and its "Street Tree Labeling" program provides identifying labels for trees which positively affect citizen regard for them; Los Angeles runs a Adopt-a-Median program; Milwaukee operates a municipal nursery; and Seattle sponsors the Tree Stewards program which provides training to volunteers who care for the City's trees.

[2] Cascadia Consulting Group., U. Washington. July 31, 2000. "Seattle Urban Forest Assessment: Sustainability Matrix." Seattle, Washington.